IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A peptide ~~Peptide~~ labeled with fluorine-18, ~~characterized in that it comprises~~ comprising the following peptide sequence ~~(PI)~~:

$$J^{1}\text{-}J^{2}\text{-}J^{3}\text{-}J^{4}\text{-}J^{5}\text{-}J^{6}\text{-}Z^{7}\text{-}U^{8}\text{-}J^{9}\text{-}J^{10}\text{-}U^{11}\text{-Arg-}J^{13}\text{-}J^{14}\text{-}U^{15}\text{-Lys-Gly-}X^{18}\text{-Gly-Thr-}J^{21}\text{-Glu-}J^{23}\text{-}J^{24}\text{-}U^{25}\text{-}J^{26}\text{-}J^{27}\text{-}J^{28}\text{-}U^{29}\text{-}J^{30}\text{-}J^{31}\text{-Arg-}J^{33}\text{-}J^{34}\text{-}J^{35}\text{-}J^{36}\text{-}B^{37}\text{-}J^{38}\text{-}J^{39}\text{-}U^{40}\text{-}J^{41}\text{-}J^{42}\text{-}J^{43}\text{-}U^{44}\text{-}J^{45}\text{-}J^{46}\text{-}J^{47}\text{-}J^{48}\text{-}J^{49}\text{-Arg-}J^{51}\text{-}U^{52}\text{-}J^{53}\text{-}J^{54}\text{-Asp-}U^{56}\text{-Lys-Ser-}Z^{59}\text{-Leu-}J^{61}\text{-}J^{62}\text{-}J^{63}\text{-}J^{64}\text{-}Z^{65}\text{-}J^{66}\text{-}J^{67}\text{-}U^{68}\text{-}J^{69}\text{-}J^{70}\text{-}J^{71}\text{-}U^{72}\text{-}J^{73}\text{-}J^{74}\text{-}J^{75} \quad (I)$$

in which J, Z, U, X and B represent amino acids such that:

- the amino acids J are chosen independently of each other ~~from natural amino acids, or derivatives thereof,~~ in such a manner that at least 50% of them are polar residues ~~chosen from~~ selected from the group consisting of Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Orn, Pro, Ser, Thr and Tyr,

~~the amino acids U are chosen from Ala, Cys, Gly, Ile, Leu, Met, Phe, Trp, Tyr and Val,~~

- the amino acid X^{18} is chosen independently of the other amino acids of the sequence from the group consisting of Ala, Asn, Cys, Gln, Gly, His, Ile, Leu, Met, Phe, Ser, Thr, Trp, Tyr and Val,

~~the amino acid B^{37} is chosen independently of the other amino acids of the sequence from Arg, Ala, Cys, Gly, Ile, Leu, Met, Phe, Trp, Tyr and Val,~~

~~the amino acid Z^{7} is chosen independently of the other amino acids of the sequence from Asp and Glu,~~

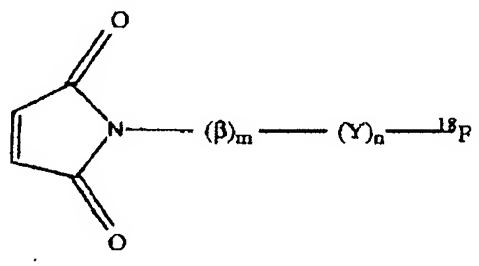
- the amino acids Z^{59} and Z^{65} are chosen independently from the group consisting of Glu, Asp, Lys and Arg,

- the amino acids U and B of the sequence (I) are selected according to one of Examples a) to j) presented in Table 1 below:

	U^{8}	U^{11}	U^{15}	U^{25}	U^{29}	B^{37}	U^{40}	U^{44}	U^{52}	U^{56}	U^{68}	U^{72}
Ex a)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
Ex b)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Leu
Ex c)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Met	Val
Ex d)	Ala	Leu	Met	Leu	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Met
Ex e)	Ala	Leu	Met	Ile	Ile	Arg	Val	Tyr	Leu	Leu	Ile	Met
Ex f)	Ala	Leu	Met	Ile	Ile	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex g)	Ala	Leu	Met	Ile	Val	Arg	Ile	Phe	Leu	Leu	Ile	Phe
Ex h)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex i)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
Ex j)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ala	Ala
Ex k)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
Ex l)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Val	Leu

wherein the superscripts of J, Z, U, X and B represent~~ing~~ the positions of these amino acids in ~~the~~ said sequence, ~~the~~ and

wherein said peptide ~~being labelled~~ is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

- m represents an integer from 0 to 10~~, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10~~;

- n represents an integer from 0 to 10~~, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10~~;

- Y represents a group ~~chosen~~ selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups,

~~it being possible for Y to be~~

wherein Y may be optionally substituted with one or more substituents

~~, each of these substituents being chosen~~

selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

- β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

- a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

- γ, V and W each independently represent [[-NR-$_1$]] -NR_1-, -O-  -S-, ethynyl, -CR_1=CR_2, -(C=O)-, -(C=S)-, -C(=NR_1)-, -C(=O)O-, -(C=S)S-, -C(=NR_1)NR_2-, -CR_1R_2-, -CR_1OR_2-, -$CR_1NR_2R_3$-, where R_1, R_2, R_3 and R_4 are independently ~~chosen~~ from the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino,

mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.

Claim 2 (Currently Amended): ~~Peptide labelled~~ The peptide labeled with fluorine-18 according to Claim 1, in which the amino acids J are ~~chosen~~ selected independently of each other from the group consisting of Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, and Val in such a manner that at least 50% of them are polar residues ~~chosen~~ selected from the group consisting of Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Pro, Ser and Thr.

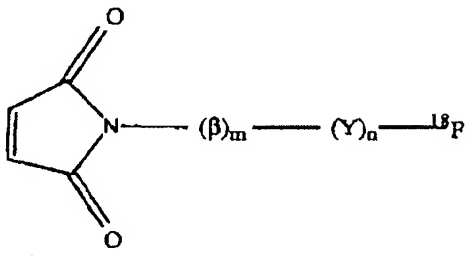
Claim 3 (Canceled)

Claim 4 (Currently Amended): ~~Peptide labelled with fluorine-18 according to Claim 1, in which the~~

The peptide labeled with fluorine-18 of claim 1 comprising a peptide sequence described by SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14,

~~peptide sequence is chosen from the sequence ID No. 1, ID No. 2, ID No. 3, ID No. 4, ID No. 5, ID No. 6, ID No. 7, ID No. 8, ID No. 9, ID No. 10, ID No. 11, ID No. 12, ID No. 13 and ID No. 14 of the appended sequence listing~~

wherein said peptide is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

m represents an integer from 0 to 10;

n represents an integer from 0 to 10;

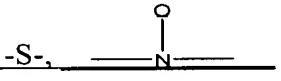
Y represents a group selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups, wherein Y may be optionally substituted with one or more substituents, each of these substituents being selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

γ, V and W each independently represent $-NR_1-$, -O-, -S-,  , ethynyl, $-CR_1=CR_2-$, -(C=O)-, -(C=S)-, $-C(=NR_1)-$, -C(=O)O-, -(C=S)S-, $-C(=NR_1)NR_2-$, $-CR_1R_2-$, $-CR_1OR_2-$, $-CR_1NR_2R_3-$, where R_1, R_2, R_3 and R_4 are independently selected from

the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.

Claim 5 (Currently Amended): ~~Peptide labelled with fluorine-18 according to any one of Claims 1 to 4, additionally comprising, linked to~~

The peptide labeled with fluorine-18 of claim 1, further comprising at its N-terminal end, the amino acid sequence ~~chosen from~~ Gly-Ser-Cys ~~and~~ or Gly-Cys-Ser.

Claim 6 (Currently Amended): ~~Peptide labelled with fluorine-18 according to any one of Claims 1 to 4, additionally comprising, linked to~~

The peptide labeled with fluorine-18 of claim 1, further comprising at its N-terminal end, ~~an~~ the amino acid sequence ~~chosen from~~ Gly-Ser-Gly-Cys (SEQ ID NO: 15), Gly-Cys-Gly-Ser (SEQ ID NO: 16) ~~and~~ or Gly-Cys-Gly-Cys (SEQ ID NO: 17).

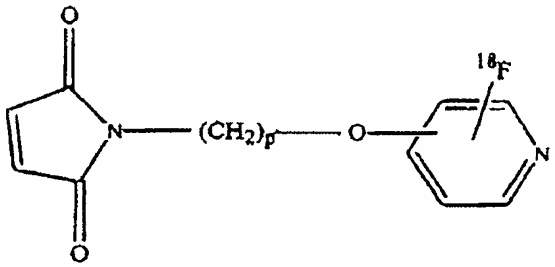
Claim 7 (Currently Amended): ~~Peptide labelled~~ The peptide labeled with fluorine-18 according to claim 1 ~~any one of Claims 1 to 6~~, in which the peptide is ~~labelled~~ labeled directly with the compound (CI) by coupling the maleimide functional group of the compound (CI) with a free -SH functional group of the said peptide, for example the thiol functional group of a cystein of the peptide.

Claim 8 (Currently Amended): ~~Peptide labelled~~ The peptide labeled with fluorine-18 according to claim 1 ~~any one of Claims 1 to 6~~, in which the peptide is ~~labelled~~ labeled

directly with the compound (CI) by coupling the maleimide functional group of the compound (CI) with a free -SH functional group of the peptide sequence (PI), for example the thiol functional group of a cystein of the peptide sequence.

Claim 9 (Currently Amended): ~~Peptide labeled~~ The peptide labeled with fluorine-18 according to claim 1 ~~any one of Claims 1 to 6~~, in which, in the compound of formula (CI), n = 1, and Y is a 3-pyridinyl group.

Claim 10 (Currently Amended): ~~Peptide labelled~~ The peptide labeled with fluorine-18 according to Claim 9, in which the compound (CI) corresponds to the following formula (CII):



(CII)

in which p is an integer from 1 to 10~~, such as 2, 3, 4, 5, 6, 7, 8 or 9~~.

Claim 11 (Currently Amended): ~~Peptide labelled~~ A peptide labeled with fluorine-18 according to Claim 10, in which the compound of formula (CII) is selected from the group consisting of ~~chosen from~~:

1-[2-(2-[^{18}F]fluoropyridin-3-yloxy)ethyl]pyrrole-2,5-dione;

1-[4-(2-[^{18}F]fluoropyridin-3-yloxy)butyl]pyrrole-2,5-dione;

1-[5-(2-[^{18}F]fluoropyridin-3-yloxy)pentyl]pyrrole-2,5-dione;

1-[6-(2-[^{18}F]fluoropyridin-3-yloxy)hexyl]pyrrole-2,5-dione;

1-[(2-[^{18}F]fluoropyridin-3-yloxy)methyl]pyrrole-2,5-dione; and

1-[3-(2-[^{18}F]fluoropyridin-3-yloxy)propyl]pyrrole-2,5-dione.

Claims 12-20 (Canceled)

Claim 21 (Currently Amended): ~~Kit for analysis and detection of negative charges at the surface of cells, characterized in that it comprises a peptide labelled with fluorine-18 according to any one of Claims 1 to 18~~

A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for the analysis and detection of negative charges at the surface of cells.

Claim 22 (Original): ~~Diagnostic kit comprising a peptide labelled with fluorine-18 according to any one of Claims 1 to 18~~

A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for diagnostic use.

Claim 23 (Currently Amended): ~~Kit for analysis and detection of microvesicles in blood, characterized in that it comprises a peptide labelled with fluorine-18 according to any one of Claims 1 to 18~~

A kit comprising the peptide labeled with fluorine-18 according to claim 1 in form suitable for the analysis and detection of microvesicles in blood.

Claims 24-25 (Canceled)

Claim 26 (Currently Amended): ~~Composition for analysis and detection for example by positron emission tomography (PET) having a peptide labelled with fluorine-18 according to any one of Claims 1 to 18 and a pharmaceutically acceptable vehicle~~

A composition comprising a peptide labeled with fluorine-18 according to claim 1 and a pharmaceutically acceptable vehicle.

Claim 27 (Currently Amended): ~~Composition for diagnosis, comprising a peptide labelled with fluorine-18 according to any one of Claims 1 to 18 and a pharmaceutically acceptable vehicle~~

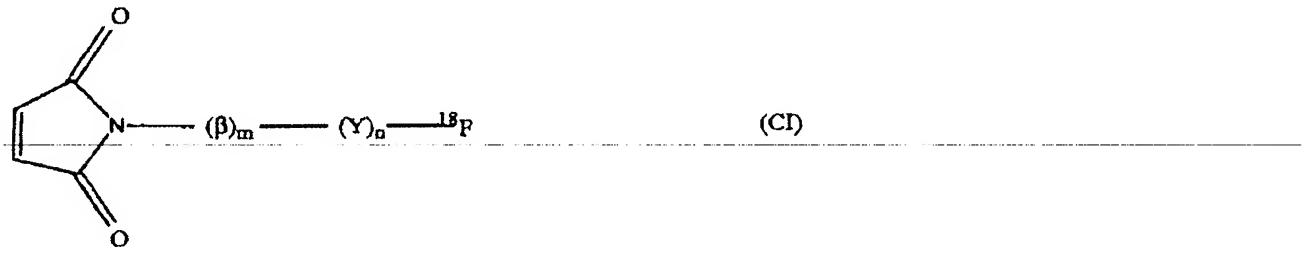
A method for detection or analysis of a phospholipid comprising:

contacting a phospholipid with the peptide labeled with fluorine-18 according to claim 1,

and detecting binding, wherein binding indicates the presence of said phospholipid.

Claim 28 (New): The method of claim 27, which is positron emission tomography (PET).

Claim 29 (New): A peptide labeled with fluorine-18 comprising a peptide sequence described by SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14, wherein said peptide is labeled directly or indirectly with a compound (CI) of general formula:



(CI)

in which:

m represents an integer from 0 to 10;

n represents an integer from 0 to 10;

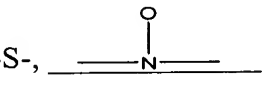
Y represents a group selected from the group consisting of alkyl groups, monocyclic or bicyclic heterocyclic groups chosen from imidazolyl, pyrazolyl, benzimidazolyl, pyridinyl, piridazinyl, pyrimidinyl, pyrazinyl, triazinyl, quinolinyl, isoquinolinyl, cinnolinyl, quinazolinyl, quinoxalinyl and purinyl groups, wherein Y may be optionally substituted with one or more substituents, each of these substituents being selected independently from the group consisting of hydrogen, (nonradioactive) halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl, C_{1-6} alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups;

β represents a radical of formula:

$$(\gamma)_a\text{-}((CR_1R_2)_b\text{-}(V)_c)_d\text{-}((CR_3R_4)_e\text{-}(W)_f)_g\text{-}$$

in which:

a, b, c, d, e, f, g each independently represent an integer from 0 to 10, such as 0, 1, 2, 3, 4, 5, 6, 7, 8, 9;

γ, V and W each independently represent -NR-$_1$, -O-, -S-, 

ethynyl, -CR_1=CR_2, -(C=O)-, -(C=S)-, -C(=NR_1)-, -C(=O)O-, -(C=S)S-, -C(=NR_1)NR_2-, -CR_1R_2-, -CR_1OR_2-, -$CR_1NR_2R_3$-, where R_1, R_2, R_3 and R_4 are independently selected from the group consisting of hydrogen, halogens, phenyl, C_{1-6} alkyl, C_{1-6} alkoxy, aryloxy, amino, mono- or di(C_{1-6} alkyl)amino, mono- or di(aryl)amino, thio, C_{1-6} alkylthio, arylthio, formyl, C_{1-6} alkylcarbonyl, arylcarbonyl, carbonyl (C_{1-6})alkoxycarbonyl, aryloxycarbonyl, C_{1-6} alkylaminocarbonyl, arylaminocarbonyl and trifluoromethyl groups, directly or indirectly on an -SH functional group.